PORTABLE LIGHT FOR LAPTOP COMPUTER

BACKGROUND OF THE INVENTION

The invention is broadly concerned with portable computers of the type commonly referred to as laptop computers wherein the keyboard is selectively closed by an upwardly pivoting cover, the inner face of which comprises the screen or monitor. The cover, when closed, provides a slim profile with all of the operating components fully protected within the attache-type structure.

Such computers, because of their intended use away from an office environment, for example, in airplanes, trains, cars, buses, hotels, worksites, and the like, are, under such circumstances, usually run by battery powerpacks which, as a matter of convenience, are normally multiple interchangeable packs.

However, one particular difficulty noted with regard to such computers is the lack of an appropriate light source. This can be a particular hardship in such locations wherein auxiliary lamps or the like are not normally available.

Laptop computer manufacturers have conventionally made no provision for incorporating a light source in that the laptop computers virtually need all of the power available for operating the computer itself as well as the energy draining laptop viewing screen.

SUMMARY OF THE INVENTION

The primary purpose of the present invention is to provide a portable light source for a laptop computer (laptop) and the like which releasably mounts to the computer and incorporates its own power source.

The portable or travel light, upon an opening of the computer and an upright positioning of the viewing screen, is adapted to mount to the upper or outer edge thereof in an adjustable manner which conforms to any currently known laptop.

The portable light is convertible between a mounting or use position wherein the light conforms to the configuration of the computer lid and is retained thereon by a combination of a frictional clamping action and a counterweight arrangement, and a stored position wherein the portable or travel light is flat, with the components thereof engaged and receivable within a flat pouch, much in the manner of an oversized eyeglass case or the like. When so stored, the portable light is easily carried in one's pocket, a computer accessory case, or the like.

Basically, the portable light includes a light assembly and a separate battery pack. The light assembly includes a forwardly positioned downwardly directed reflector which internally mounts a lamp or light bulb. A housing immediately behind the reflector mounts the electrical circuitry, bulb socket and the like. A combined storage and mounting pocket is provided rearwardly of the circuitry housing and rearwardly directed. This pocket is defined by an elongate top mounting panel, which can be unitarily formed with the top of the circuitry housing and reflector, and a lower parallel substantially shorter latching panel.

The battery pack includes an internal battery chamber with a storage compartment therebelow for extra light bulbs and the like, and an overlying circuitry compartment toward the opposite end of the battery chamber from the storage compartment. A slidably mounted side portion of a wall of the battery pack is in the nature of a closure or door to selectively open the battery chamber and storage compartment.

The circuitry compartment of the battery pack, which defines one end thereof, includes a pair of opposed mounting clips which form opposed inwardly directed slots to slidably receive the opposed longitudinal edges of the mounting panel of the light assembly upon an orientation of the battery pack at right angles to the light assembly. Electrical contact between the battery pack and light assembly can be made through engaging contacts on the undersurface of the mounting panel and the end of the battery pack between the clips, or, alternatively, by a separate wire and jack assembly.

With the battery pack and light assembly joined as described above, the battery pack will lie against the back or outer face of the cover of the laptop computer with the light assembly overlying the screen and rearwardly slid to engage the latching panel with an appropriate portion of the computer cover, either a peripheral lip thereon, a projecting latch, or similar structure whereby the battery pack acts in a manner of a counterweight for the forwardly projecting light assembly, and the edge portion of the computer cover is clamped appropriately between the battery pack and latching panel.

When the light is to be stored, the battery pack is removed from the mounting panel, aligned with the light assembly, and slid into the storage pocket to parallel and underlie the mounting panel.

Additional features and advantages will become apparent from a more detailed description of the invention following hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a partial perspective view of an open laptop computer with the portable travel light of the invention mounted thereon;

FIG. **2** is an exploded perspective view of the portable light with the two components aligned for mounting the assembly;

FIG. **3** is a side elevational view, with portions broken away, illustrating the portable light assembled in operative or use position;

FIG. **4** is a side elevational view, with a portion broken away, illustrating the portable light assembled in its stored position; and

FIG. **5** is a top plan view of the portable light in its stored position.

DESCRIPTION OF PREFERRED EMBODIMENT

Referring now more specifically to the drawings, the portable or travel light **10** comprises two basic interacting components, a battery pack **12** and a light assembly **14**. Noting FIGS. **1**, **2** and **3**, the two components are assembled in a use position wherein the portable light **10** is particularly adapted for mounting on the outer flanged edge portion **16** of the combined cover and view screen **18** of a laptop computers, commonly referred to as a laptop.

In a second position, the battery pack and the light assembly, as illustrated in FIGS. **4** and **5**, are releasably compacted in a flat storage or stored position, capable of being itself stored within a protective pouch or the like.

The battery pack **12** comprises a relatively flat rectangular body having opposed planar front and rear face walls **22** and **24**, substantially flat bottom and top end